Work Orde		0422		*100	1422*						Page 1		
Revision ID:	D4009-5 Ground Strap			Accept	*N900	040	100	)*	Setup	up Start Stop	1112		
Start Date:	5/09/13	Start Qty: 10.00	*10*		Cust Item ID: Customer:								
Required Date:	5/09/13	<b>Req'd Qty:</b> 10.00	*10*										
Reference:								_			·		
Approvals:	Process Pla	in: MLJ	Date: 13-04-12	7 Tooling:	D	ate:	<u> </u>		Run	Start	1711	₹1*	
				<b>SPC (Y/N):</b>	D	ate:				Stop	*NF	R2*	
Sequence ID/ Work Center II	)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
Draw Nbr	Rev	ision Nbr											~ ~
D4009	A	:										0	
100				0.00									
*100* Small Fab		Memo		0.00				IDX	<u> </u>	·		f)3	105/01
Small Fab			ze as per dwg D4009										,
110		QC5- Inspect part compl	leteness to step on W/O	0.00		ο <b>Λ</b> ο					•	<	<b>≥</b> , )
*110*					(	30		_10	·	_,			13605/51
QC Quality Control		Memo		0.00				-					
													00
120		Identify as per dwg & St	ock Location:	0.00								•	
*120*			<del></del>					10				l	13/05/07
Packaging		Memo		0.00				t					-

Memo

Packaging

										DQA:	Date	•
NCR: Y	es / No	1			WORK ORDER NON-	CONF	ORN	MANCE / UPDATE			<del></del>	
					` ·					QA Closed:	Date	2:
		1			DISPOSITION	ı		AGAII	NST DE	PARTMENT	/PROCESS	
Work Orde	er:	1			Rework	1 l		Skid-tube Crossto	ube	7	Water Jet	Engineering
Part N	lo.				Scrap Machining			<b>⊢</b>		Pro	d. Eng. Coor.	Quality
		<del></del>			Use-as-is	]   7	Therm	oforming Finish	ning	Rec/Stor	re/Packaging	Other
NCR N	lo	i		<del></del>	Work Order Update Large Fab Compos			site		Supplier		
Root				Descri	ption of work order update	Init	tial	Action		Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief	f Eng	Description		Date	Verification	QC Inspector
Doc/Data		1 i										
quip/Tooling						İ						ŀ
Operator	$\Box$											
Material		1 :										
Setup							İ					
Other		1 )	1									
Process	- ;	1 !										
Supplier												
Training		li									·	
Jnapproved	<u> </u>	1 !	<u> </u>	L		AULT	CATEC	SORY			<u> </u>	
Landi	ng Gear	-			General	AULI				<del></del>		
201101	Bending	ì		Г	Bend	G	rain		Г	Ovalized	Γ	Pressure/Forced
	⊢ `	l Not Conce	entric to	o/s	BOM/Route	$\vdash$	ardwai	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	In	spection	on Incomplete		Part Incorred	ct	Weld
	<b>⊢</b>	ا /Crimped	1		Burrs	-		ions Incomplete/Unclear		Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs	1			Contamination	М	lainte	nance		Part Moved		<del></del>
	Heat Tre	eat			Countersink	М	lislabe	led		Positioned V	Vrong	·
	Inspecti	ا on Strip ir	n Tube		Cut Too Short	М	lisread			Power Loss/	Surge	Other
	Ripples	in Bend			Drill Holes		ffset					
	Torque	Waves in	Extrusio	n 🗌	Drawing		ut of C	Calibration				
	Turning	Sequence	е		Finish		ut of S	equence				
	Wave/T	wist in Tu	ıbe		Folio	0	utside	Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord April-22-13 1:-		0422			*100	1422*	, , , , , ,						Page 2
Item ID: Revision ID: Item Name:	D4009-5 Ground Strap			, .	Accept	*N900	<b>040</b>	100	)* 5	Setup	Start Stop	IV	S1* S2*
Start Date: Required Date Reference:	5/09/13	Start Qty: 10.00 Req'd Qty: 10.00		*10* *10*		Cust Item l Customer:	D:					IV	<b>م</b> ر
Approvals:	Process Pla	in:	Date:	,	Tooling: SPC (Y/N):		ate:		I	₹un	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center I	D	Operation Description QC21- Final Inspection -	Work Order I	Release	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
QC QC		Memo			0.00						110	12	

Quality Control

1715 /6 77) U13.0502

									DQA:	Date:	•		
NCR: Ye	s / No	<u> </u>			WORK ORDER NON-C	ONFOR	MANCE / UP	DATE	QA Closed:	Date:			
Work Order:					DISPOSITION AGAINST			AGAINST DE	DEPARTMENT/PROCESS				
Work Order.		· ·			Rework		Skid-tube	Crosstube		Water Jet	Engineering		
Part No	).	•						Small Fab	Pro	d. Eng. Coor.	Quality		
NCR No.					1 <u></u> 1 " "1			Finishing Composite	Rec/Sto	re/Packaging Supplier	Other		
Root		·		Descri	ption of work order update	Initial	Ac	tion	Sign &				
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	ef Eng Description		Date	Verification	QC Inspector		
Doc/Data													
Equip/Tooling	7			r							-		
Operator				·									
Material		' '											
Setup			•										
Other		]											
Process													
Supplier	7	1		Í					1	l			

**FAULT CATEGORY** 

Grain

Hardware

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Inspection Incomplete

Instructions Incomplete/Unclear

Pressure/Forced

Weld

Other

Temperature/Cure

Wrong Stock Pulled

Ovalized

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Over/Under tolerance

General

Bend

Burrs

BOM/Route

Contamination

Countersink

Cut Too Short Drill Holes

Drawing

Finish

Folio

Broken/Damaged

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Training Unapproved

**Landing Gear** 

Bending

Cracks

Cuffs

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Heat Treat

Centre Not Concentric to O/S

**Picklist Print** 

April-22-13 1:40:00 PM

Work Order ID:

100422

Parent Item:

D4009-5

Parent Item Name:

Ground Strap

**Start Date: 5/09/13** 

Required Date: 5/09/13

Page 1

**Start Qty: 10.00** 

Required Qty: 10.00

**Comments:** 

IPP rev A 09.12.23 new Issue Prelim EC verified by: DD 562 DD verified by: FC

IPP Rev:B 10.05.03 as per ECN10-

	362 DD verified b	y:EC									_		
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4009		Manufactured	No			100	f	97.1250	1.125	11.25/	//		-/-
Ground Strap									<del></del>		/_)/-3	[05 <sub>-</sub> ]	101

Location Loc Code Loc Qty GA 97.125 57049 74 72538 23.125

										DQA:	Date	·
NCR: Y	es / No				WORK ORDER NON-C	ON	NFORM	MANCE / UP	DATE	QA Closed:	Date	:
		1 t			DISPOSITION				AGAINST DE			
Work Orde Part N NCR N	lo				Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root		T .		Descri	ption of work order update		nitial	Act	tion	Sign &		T
Cause	Date	Step	Qty		or Non-conformance	ł	ief Eng		ription	Date	Verification	QC Inspector
Doc/Data	-	-	~.,						-			
Equip/Tooling	=					1						
Operator		İ										
Material												
Setup												
Other												
Process						ł						
Supplier												
Training												
Unapproved						İ						
					F	AUL	T CATE	GORY				
Landi	ng Gear				General		_					_
	Bending				Bend		Grain			Ovalized		Pressure/Forced
	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
	Crushed/Crimped		Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled		
	Cuffs		Contamination		Mainte	nance		Part Moved				
	Heat Tre	at			Countersink		Mislabe	eled		Positioned V	· · · · · · · · · · · · · · · · · · ·	,
	Inspection	n Strip in	Tube		Cut Too Short		Misread	1		Power Loss/	Surge	Other
	Ripples in	n Bend			Drill Holes		Offset					
	Torque V	Vaves in I	Extrusio	n [	Drawing		Out of 0	Calibration				

Out of Sequence

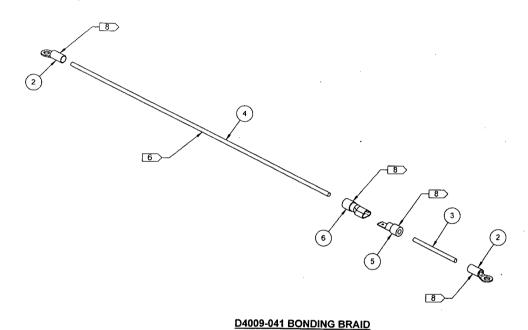
Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish Folio

	ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
-		×	D4009-041	BONDING BRAID	JCA-M47-4-01
-	2	2	D4009-1	TERMINAL END	
L	3	1	D4009-3	GROUND STRAP	
L	4	1	D4009-5	GROUND STRAP	
L	5	1	D4009-7	TAB	
L	6	1	D4009-9	RECEPTACLE	



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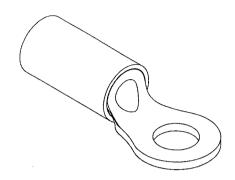
NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4009-041" AND B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK
7) WEIGHT: N/A
8) USE CRIMPING TOOL P/N 59824-1

NEW ISSUE Α. REV. DESCRIPTION DATE DESIGN DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWN DRAWING NO. CHECKED REV. A D4009 MFG. APPR. SHEET 1 OF 5 APPROVED TITLE DE APPR. DATE 10.02.05

D

JOHN CAMERON AVIATION PART NUMBER DAIST AEROSPACE PART NUMBER 04009-1 FEE EA-Mark on

## **SPECIFICATION CONTROL DRAWING**



DART PART NUMBER	SUPPLIER	SUPPLIER PART NUMBER	MILITARY PART NUMBER	INSTALLATION TOOL PART NUMBER
D4009-1	TYCO ELECTRONICS	36161	MS25036-112	59824-1

#### **D4009-X TERMINAL END**



MATERIAL: N/A     PINISH: N/A     TINISH: N/A     TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED     UNITS: INCHES UNLESS OTHERWISE NOTED     BREAK SHARP EDGES: N/A     IDENTIFICATION: N/A
6) IDENTIFICATION: N/A 7) WEIGHT: N/A

DESIGN DRAWN		DART AEROSPACE HAWKESBURY, ONTARIO,	
CHECKED	B	DRAWING NO.	REV. A
MFG. APPR.	臣	D4009	SHEET 2 OF 5
APPROVED	10	TITLE	SCALE
DE APPR.	-#	GROUND STRAP	NTS
DATE 10.0	2.05	COPYRIGHT © 2010 BY DART A EF THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON NOT TO BE USED FOR ANY PURPOSE OR COMPED OR COMMUNICATION WRITTEN PERMISSION FROM DART ARROSS	THE EXPRESS CONDITION THAT IT IS TO ANY OTHER PERSON WITHOUT

100422

D

SPECIFICATION CONTROL DRAWING

DART PART NUMBER LENGTH D4009-3 1.5 D4009-5 13.5

**D4009-X GROUND STRAP** 

NOTES:
1) MATERIAL: MADE FROM AVIALL P/N 1171 (OR SEA-171) OR C.O.R.E. AVIATION P/N QQ8575R36T250
2) FINISH: NIA:
3) TOLERANC
4) UNITS: INCHES UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: N/A
7) WEIGHT: N/A

JOHN CAMERON AVIA (ION PART NUMBER

RET KA NALAY

REL 1/2 V-14 1

DANT AEROSPACE PART NUMBER

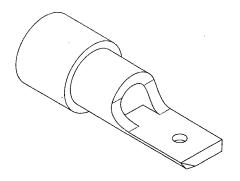
Late 6.5

DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA CHECKED DRAWING NO. D4009 MFG. APPR. APPROVED TITLE DE APPR. **GROUND STRAP** DATE 10.02.05

REV. A SHEET 3 OF 5 SCALE NTS COPYRIGHT © 2010 BY DART AEROSPACE LTD
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# SPECIFICATION CONTROL DRAWING



DART PART NUMBER	SUPPLIER	SUPPLIER PART NUMBER	INSTALLATION TOOL PART NUMBER
D4009-7	TYCO ELECTRONICS C.O.R.E. AVIATION	8-696372-1	59824-1

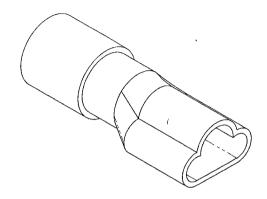
#### D4009-X TAB

DELEASED 2010 -05- 0 5

	NOTES:
	1) MATERIAL: N/A
	2) FINISH: N/A
ĺ	3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTE
	4) UNITS: INCHES UNLESS OTHERWISE NOTED
	5) BREAK SHARP EDGES: N/A
1	6) IDENTIFICATION: N/A
I	7) WEIGHT: N/A

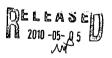
DESIGN	45	DART AEROSPACE LTD	
DRAWN	<b>8</b> 51	HAWKESBURY, ONTARIO, CANADA	
CHECKED	B	DRAWING NO.	REV. A
MFG. APPR.	E	D4009	SHEET 4 OF
APPROVED	140.	TITLE	SCALE
DE APPR.	-#	GROUND STRAP	NTS
DATE 10.02.05		COPYRIGHT © 2010 BY DART AEROSPACE LTD  THIS DOCUMENT OF PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EVPRESS CONDITION THAT IT IS  NOT TO SE USED FOR MY PURPOSE ON COPEC OR COMMENCE TED TO ANY OTHER PERSON WITHOUT  WHITE PRIVATE ON THE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PRIVATE OF THE PERSON WITHOUT  WHITE PERSON WITH PERSON WITHOUT  WHITE PERSON WITH PERSON WITHOUT  WHITE PERSON WITH PERSON WITHOUT  WHITE PERSON WITH PERSON WITHOUT  WHITE PERSON WITH PERSON WITH PERSON WITH PERSON WITHOUT  WHITE PERSON WITH PERSON WITH PERSON WITH PERSON WITH PERSON WITH PERSON WITH	

### **SPECIFICATION CONTROL DRAWING**



DART PART NUMBER	SUPPLIER	SUPPLIER PART NUMBER	INSTALLATION TOOL PART NUMBER
D4009-9	TYCO ELECTRONICS C.O.R.E. AVIATION	8-696371-1	59824-1

#### **D4009-X RECEPTACLE**



NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: N/A
7) WEIGHT: N/A

DESIGN DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWN CHECKED DRAWING NO. REV. A D4009 MFG. APPR. SHEET 5 OF 5 TITLE APPROVED SCALE GROUND STRAP DE APPR. NTS DATE COPYRIGHT © 2010 BY DART AEROSPACE LTD
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